

NEW ENGLAND NOTE

REDISCOVERY OF *CAREX TYPHINA*  
(CYPERACEAE) IN MAINE

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*Carex typhina* Michx. is a perennial sedge of open and forested wetland communities. It belongs to the section *Squarrosae* Carrey, a group recognized by persistent styles and thin-walled, inflated, abruptly tapered perigynia with bidentate beaks (Gleason and Cronquist 1991). Though found throughout much of the eastern United States, *C. typhina* is rare in northern New England (Eastman 1978; Sorrie 1985; Vermont Nongame and Natural Heritage Program 1996). It ranges north to Essex County, Massachusetts and then is disjunct to southwestern Maine (Seymour 1982).

Bean (1942) was first to report *Carex typhina* in Maine. He collected the sedge in Leeds, Androscoggin County, from the shore of Wayne Pond (now referred to as Androscoggin Lake) in 1940 (*R. Bean 36826*, MAINE). Bean reported two stations of the plant along the “Cape,” the delta where the Dead River meets the northwest shore of Androscoggin Lake. *Carex typhina* has not been reported from Maine since its initial discovery and was subsequently ranked SH (i.e., historically occurring and not reported for more than 20 years) by the Maine Natural Areas Program (1999).

On 16 July 2002, during a field trip for the Josselyn Botanical Society’s 102nd meeting, we discovered a single plant of *Carex typhina* growing in a lacustrine floodplain forest on the northwest shore of Androscoggin Lake. Further survey effort yielded additional plants approximately 200 m from the initial discovery location. James Goltz and Candice McKellar observed a larger colony of *C. typhina* along the reverse delta of the Dead River. A voucher specimen was collected from this population.

SPECIMEN CITATION: U.S.A. Maine: Androscoggin Co., Leeds, floodplain forest along outlet delta of Androscoggin Lake, associated species: *Acer saccharinum*, *Carex intumescens*, *C. lupulina*, *Onoclea sensibilis*, and *Nyssa sylvatica*, 16 Jul 2002, J. Goltz s.n. (MAINE).



During a return trip, the primary author observed over 235 flowering individuals of *Carex typhina* on 30 July 2002. The plants were distributed over approximately 2.5 square kilometers in 32 subpopulations. Global Positioning System coordinates of the different colonies confirmed the population spanned into Wayne, Kennebec County. This represents a new county record for *C. typhina*. A second collection was taken to voucher this location.

SPECIMEN CITATION: U.S.A. Maine: Kennebec Co., Wayne, floodplain forest along outlet delta of Androscoggin Lake, associated species: *Acer saccharinum*, *Carex intumescens*, *C. lupulina*, *Onoclea sensibilis*, *A. rubrum*, and *Quercus rubra*, 22 Jul 2002, M. Arsenault s.n. (MAINE).

*Carex typhina* was most abundant along the delta of the Dead River and became very sparse within the lacustrine floodplain forest to the south of the delta. This vernaly flooded area had a canopy dominated by *Acer saccharinum* L., *A. rubrum* L., *Fraxinus pennsylvanica* Marshall, and *Quercus rubra* L. Of note is that a few trees of *Nyssa sylvatica* Marshall, a species uncommon in Maine, were occasional in this plant community. The shrub layer consisted primarily of *Lyonia ligustrina* (L.) DC., *Spiraea tomentosa* L., and *Viburnum dentatum* L. var. *lucidum* Aiton. Common herbs included *C. intumescens* Rudge, *Onoclea sensibilis* L., *Osmunda regalis* L. var. *spectabilis* (Willd.) A. Gray, *O. claytoniana* L., *C. lupulina* Muhl. ex Willd., *C. projecta* Mack., *C. scoparia* Schkuhr ex Willd., *Iris versicolor* L., *Apios americana* Medik., and *Uvularia sessilifolia* L.

Conservation of *Carex typhina* in New England should be of high priority due to its regional rarity. In Maine, this species was found to inhabit a natural community with an unusual hydrologic regime on privately owned land. The high volume of melt water from the Androscoggin River forces the Dead River to reverse its flow in the spring (i.e., it changes from an outlet to an inlet), subsequently flooding the delta and neighboring habitats on Androscoggin Lake. A dam has been installed on the Dead River with flashboards that close when the flow of the river is reversed, reducing the severity of flood events. There is current pressure on part of the Androscoggin Lake Improvement Corporation to improve the dilapidated condition of the flashboards to further reduce vernal flows into the lake in an effort to improve water quality (Saunders 2001). Research is currently underway to ascertain the effect of minimizing spring flood events on *C. typhina* and associated natural communities (Karol Worden, Woodlot Alternatives, pers. comm.) and to monitor the population over several years (Theresa Kerchner, Androscoggin Lake Improvement Corp, pers. comm.).



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